

REMARKS

This responds to the Office Action mailed on April 11, 2006.

No claims are amended, canceled or added; as a result, claims 1-2, 4-5, 11-13, 19-20, 22-23, 32-34, 40-41, 64, 68, 78 and 91-92 remain pending in this application.

Claim Objections

Claims 1 and 22 were objected to because of the following informalities: The Office Action suggested that the word “BLAST” should be after “Block-Level Abstract Syntax Tree.” Applicant has amended claims 1 and 22 substantially as suggested in the Office Action. Applicant respectfully requests withdrawal of the objection to claims 1 and 22.

§101 Rejection of the Claims

Claims 22-23, 25-26, 32-34 and 40-41 were rejected under 35 U.S.C. § 101 because the claimed invention is alleged to be directed to non-statutory subject matter. In particular, the Office Action stated that signal and carrier waves do not fall within any class of statutory subject matter according to the “Interim Guidelines for Examination for Patent Applications for Patentable Subject Matter Eligibility” Annex IV, Published in OG 22 Nov. 2005. Applicant respectfully disagrees with the Interim Guidelines and notes that the Interim Guidelines do not have the force of law. However, in order to expedite prosecution, Applicant has amended claims 22-23, 25-26, 32-34 and 40-41 such that the claims now recite a “tangible-computer-readable media.” Applicant reserves the right to re-introduce claims directed to signal bearing media in a continuation application. Applicant submits that claims 22-23, 25-26, 32-34 and 40-41 as amended are directed to statutory subject matter. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 22-23, 25-26, 32-34 and 40-41.

Maintenance of the §103 Rejection of the Claims

Applicant notes that no formal rejection of the claims under 35 U.S.C. §§102 or 103 was made in the Office Action, rather the Office Action provides the Examiner's reasoning why Applicant's arguments in the response filed January 30, 2006 were considered unpersuasive. For the purposes of this response, Applicant assumes that the Examiner intended to maintain the rejection of Claims 1-2, 4-5, 11-13, 19-20, 22-23, 25-26, 32-34, 40-41, 64, 68, 78 and 91-92 under 35 U.S.C. § 103(a) as being unpatentable over Clark (U.S. Patent No. 5,297,150), and further in view of Dollin et al. (U.S. Patent No. 6,594,783) and Jacobson (U.S. Patent No. 5,317,511). In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)). Applicant respectfully submits that a *prima facie* case of obviousness does not exist with respect to the claims because the claims contain elements not found in the cited references and because no proper motivation to combine the references has been provided.

For example, claims 1 and 22 recite "determining a cross-reference between the program slice diagram, a control block in the one or more control blocks, and a subset of the source code." In response to Applicant's arguments filed January 30, 2006, the Office Action admits that neither Clark nor Dollin disclose the recited language. However, the Office Action goes on to state that Jacobson in FIG. 1, at column 4, lines 55-67, and at column 5, lines 35-40 teaches the recited language. Specifically, the Office Action states that Jacobsen's "procedure division" is a program slice and subset of the source code. Applicant respectfully disagrees with this interpretation of Jacobson for several reasons. First, Jacobson's "procedure division" and a program slice are two entirely different things. When properly interpreted in light of the specification and without reading limitation from the specification into the claims, a program slice comprises a sequence of program statements that are influential on the value of one or more

variables at a given point of the program. Thus a program slice is not a mere reference to all of the uses of a name or variable, rather it shows those uses of a variable that can influence the value of the variable (see specification at page 9, lines 3-19). The “procedure division” of Jacobsen is a merely a code fragment with references to a name highlighted regardless of their function in the program (see FIG. 1). As a result, a program slices is clearly not the same thing as Jacobson’s “procedure division”.

Second, the Office Action is equating one element of Jacobsen with two elements of Applicant’s claims. Assuming the “procedure division” teaches anything, at best it can teach either a program slice OR a subset of the source code, it cannot teach both at the same time. As noted above, a “procedure division” is not the same as a program slice.

In view of the above, the combination of Clark, Dollin and Jacobson fails to teach or suggest each and every element of claims 1 and 22. Therefore the claims 1 and 22 are non-obvious with respect to the combination. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 1 and 22.

Even if the combination of Clark, Dollin and Jacobson taught or suggested each and every element of Applicant’s claims 1 and 22 (which is not admitted), the Office Action does not provide a proper motivation to combine the references. The Office Action must show a suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. M.P.E.P. 2143.01. The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine the reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. In *re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002). Mere conclusory statements do not fulfill the Office Action’s burden. *Id.* The court in Lee also stated that “[t]his factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority.”

With respect to the motivation to combine Clark, Dollin and Jacobson, Applicant respectfully submits that the Office Action has not provided such required objective evidence or explanation for a suggestion or motivation to combine. Instead, the Office Action merely makes the conclusory statements that the modification would be obvious because “it is easier for a computer programmer to view and understand the source code and the user can look up the

definition of, or references to, a name without typing the name and as a result, lookups are rapid and accurate" and "efficient analysis of the program." Applicant respectfully notes that the motivation to combine the references provided in Office Action are mere conclusory statements that are not supported with any citations to the references or other objective evidence. Applicant respectfully submits that the Office Action has not provided any objective evidence or reasoning as to how the combination of Clark, Dollin and Jacobson would provide results indicated by the conclusory statements. As a result, the Office Action fails to provide any proper objective evidence or explanation of a suggestion or motivation to combine Clark, Dollin and Jacobson. Because no motivation to combine Clark, Dollin and Jacobson is present, Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 1 and 22.

Claims 2, 4-5 and 19 depend either directly or indirectly from claim 1. Claims 23, 25-26 and 40 depend either directly or indirectly from claim 22. These dependent claims inherit the elements of the respective base claims and add further patentable distinctions. They are therefore non-obvious for at least the reasons discussed above with respect to claims 1 and 22. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 2, 4-5, 19, 23, 25-26 and 40.

A further example of an element not found in the combination of Clark, Dollin and Jacobson is found in claims 11 and 32, each of which recite "performing semantic abstraction to group a subset of nodes together based on the semantic information." Applicant's specification, at page 11, lines 14-19 provides a description of both syntactic and semantic abstraction. As stated in the specification:

A syntactic abstraction allows the user to collapse into a single node, several nodes corresponding to one or more blocks of BLAST viewer 264. A semantic abstraction allows the user to collapse into a single node, several nodes corresponding to a logical category of computations. (emphasis added).

Further definition of a logical category as the term is used in the specification is found on page 23, lines 1-14, which state "semantic abstractions are based on either abstract data structures or logical events that are identified through a domain specific template."

The Office Action asserts that Dollin, at column 5, lines 4-16, teaches semantic abstraction, because Jacobson's nodes may include a set of nodes representing a conditional node. While a conditional node may use logic (in Jacobson, an "if" condition) to form a logical expression, the semantic abstraction as properly interpreted by the specification is quite different from a mere logical statement and encompasses data structures and logical events that may be organized in a domain specific way through the use of templates. As a result, Dollin does not teach performing semantic abstraction to group a subset of nodes together based on the semantic information.

Additionally, no proper motivation to combine Dollin with Clark and Jacobson has been provided. As noted above, the Office Action must show a suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine the reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding.

With respect to the motivation to combine Clark, Dollin and Jacobson, Applicant respectfully submits that the Office Action has not provided such required objective evidence or explanation for a suggestion or motivation to combine. Instead, the Office Action merely makes the conclusory statements that the modification would be obvious because one of ordinary skill in the art would be motivated to provide "a method that allows an improved code analysis through the use of an abstract syntax tree and semantic operation". This statement is not supported by any citation to a reference or any other objective evidence as required by the court in *Lee*. Further, the Office Action has not provided any objective evidence or reasoning as to how the combination of Clark, Dollin and Jacobson would provide results indicated by the conclusory statements. As a result, the Office Action fails to provide any proper objective evidence or explanation of a suggestion or motivation to combine Clark, Dollin and Jacobson.

In view of the above, the combination of Clark, Dollin and Jacobson fails to teach or suggest semantic abstraction and thus fails to teach each and every element of Applicant's claims 11 and 32. Also, no proper motivation to combine the references exists. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 11 and 32.

Claims 12-13 and 20 depend from claim 11. Claims 33-34, and 41 depend from claim 32. These dependent claims inherit the elements of the respective base claims and add further patentable distinctions. They are therefore non-obvious for at least the reasons discussed above with respect to claims 11 and 32. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 12-13, 20, 33-34 and 41.

Claim 64 recites “a controller that cross-references information between the code browser, the block-level abstract syntax tree viewer, the program slice browser, and the template viewer.” The Office Action again states that Jacobson’s “procedure division” teaches a program slice. As discussed above, Jacobson’s “procedure division” does not teach or suggest a program slice. In addition, the Office Action states that Jacobson discloses a template viewer at column 7, lines 10-26, asserting that a hash table is the same as a template. Applicant respectfully disagrees with this interpretation of a template. A hash table is a clearly not a template, it is rather a way of organizing a list of reserved words. As discussed on page 22, lines 20-26 of the specification, a template consists of abstract data structures and logical events. Abstract data structures and logical events are quite different from a list of reserved words maintained in a hash table. As a result, the combination of Clark, Dollin and Jacobson does not render claim 64 obvious. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claim 64.

Claims 68, 78, 91 and 92 depend either directly or indirectly from claim 64. These dependent claims inherit the elements of the respective base claims and add further patentable distinctions. They are therefore non-obvious for at least the reasons discussed above with respect to claim 64. Applicant respectfully requests reconsideration and the withdrawal of the rejection of claims 68, 78, 91 and 92.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6954 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By RJ 23

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 21st day of July, 2006.

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Name

Signature